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| APPLICATION NO. | FII | LING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------|------------|------------|----------------------|-------------------------|------------------|
| 10/797,057 | 03/11/2004 | | Hyun-kwon Chung | 1293.1691C3 | 4695 |
| 49455 | 7590 | 09/01/2006 | | EXAMINER | |
| | | & BUI, LLP | STEVENS, ROBERT | | |
| 1400 EYE S SUITE 300 | TREET, N | W | | ART UNIT | PAPER NUMBER |
| WASHING | TON, DC | 20005 | 2162 | | |
| | | | | DATE MAILED: 09/01/2000 | 5 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | | |
|---|--|---|---|-----------|--|--|--|
| Office Action Summary | | 10/797,057 | CHUNG ET AL. | | | | |
| | | Examiner | Art Unit | | | | |
| | | Robert Stevens | 2162 | | | | |
| | The MAILING DATE of this communication | | with the correspondence add | iress | | | |
| Period fo | | DI V IO OET TO EVOIDE « | AAONTHAO OD THIDTY (OO |), DAVO | | | |
| WHIC - Exter after - If NO - Failu Any r | ORTENED STATUTORY PERIOD FOR RECHEVER IS LONGER, FROM THE MAILING asions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory per to reply within the set or extended period for reply will, by state to the control of the control o | B DATE OF THIS COMMULE 1.136(a). In no event, however, may iod will apply and will expire SIX (6) No stute, cause the application to become | NICATION. y a reply be timely filed MONTHS from the mailing date of this core ABANDONED (35 U.S.C. § 133). | | | | |
| Status | | | | | | | |
| 1)⊠ | Responsive to communication(s) filed on 20 | 6 June 2006. | | | | | |
| 2a) <u></u> □ | This action is FINAL . 2b)⊠ T | his action is non-final. | | | | | |
| • | Since this application is in condition for allo | • | · | merits is | | | |
| | closed in accordance with the practice unde | er <i>Ex parte Quayle</i> , 1935 C |).D. 11, 453 O.G. 213. | | | | |
| Dispositi | on of Claims | | | | | | |
| 4) 🖾 | Claim(s) 1-20 is/are pending in the applicat | ion. | | | | | |
| | 4a) Of the above claim(s) is/are witho | drawn from consideration. | | | | | |
| · | Claim(s) is/are allowed. | | | | | | |
| · | Claim(s) <u>1-20</u> is/are rejected. | , | • | | | | |
| | Claim(s) is/are objected to. | d/or election requirement | | | | | |
| ا_ا(ە | Claim(s) are subject to restriction an | u/or election requirement. | | | | | |
| Applicati | on Papers | | | | | | |
| | The specification is objected to by the Exam | | | | | | |
| , | The drawing(s) filed on is/are: a) \square a | • • | <u> </u> | | | | |
| | Applicant may not request that any objection to t | - · · | | · | | | |
| | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| , | , | Examiner. Note the attack | led Office Action of form F1V | 0-132. | | | |
| Priority u | ınder 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | | |
| | 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| | | · | | | | | |
| Attachment | | ,, (*) , | | | | | |
| | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) | | w Summary (PTO-413) No(s)/Mail Date | | | | |
| 3) 🔲 Inform | nation Disclosure Statement(s) (PTO-1449 or PTO/SB/r No(s)/Mail Date | | of Informal Patent Application (PTO- | -152) | | | |

DETAILED ACTION

1. The Office withdraws the previous rejections of the claims under 35 U.S.C. §103(a), in light of the amendment. However, the Office has set forth new rejections under 35 U.S.C. §§102(e) and 103(a), in light of the amendment.

Response to Arguments

2. Applicant's arguments with respect to claims 1-20 have been considered but are most in view of the new ground(s) of rejection.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/16/2006 has been entered.

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Claim Rejections - 35 USC § 102

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 1-7, 11-13 and 15-20 rejected under 35 U.S.C. 102(e) as being anticipated by Tsumagari et al. (US Patent Application No. 2003/0161615, filed Feb. 26, 2003 and published Aug. 28, 2003, hereafter referred to as "Tsumagari").

Regarding independent claim 1, Tsumagari discloses: A method of reproducing audio and/or video (AV) data in an interactive mode using a markup document (See Tsumagari Abstract), the method comprising: obtaining the markup document and markup resources representing AV data files that are linked and embedded into the markup document, from an information storage medium; (See Tsumagari Figure 31 and 34, and paragraph [0065], discussing embedding/integrating HTML and DVD-Video) and enabling a user to interact with the markup document for presentation, via a presentation engine operable in a reproduction state, a pause state, and a stop state, (See Tsumagari Figure 1 #40 user operations, in context of [0261] discussing operational states) wherein the markup document is presented on a screen and selected markup resources representing AV data files

are provided in a display window defined by the markup document on the screen according to a document life cycle, if the reproduction state is selected by the user, via a remote controller, (See Tsumagari Figure 2C in context of [0141]-[0142], discussing the display of mixed A/V contents for playback and ENAV, e.g., HTML) and wherein the presentation of the selected markup resources representing AV data files is paused or stopped, if the pause state or the stop state is selected by the user, via the remote controller. (See Tsumagari [0088], discussing remote controller use for transmitting users inputs, and paragraph [0261] discussing event signals associated with playback operation.)

Regarding claim 2, Tsumagari discloses preloading a markup document into memory (See Tsumagari [0421] in context of [0395]-[0396], disclosing buffer management); loading a markup document onto the screen (See Tsumagari [0402] in context of [0418], discussing rendering); and, interaction between the document and user (See Tsumagari [0410]-[0414], discussing ENAV Interface handler functions).

Regarding claims 3-4, Tsumagari discloses termination and discarding of the displayed document (See Tsumagari [0346] discussing termination, in the context of [0421], discussing buffer management).

Regarding claims 5-7, Tsumagari discloses transition from pause or stop to play, and the use of timing and state data. (See Tsumagari [0207]-[0208] discussing

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the transition from pause to play, [0067] and [0416] discussing timing data, and [0261] in the context of [0432] discussing operational states and the retaining of status information.)

Regarding independent claim 11, Tsumagari discloses: A method of reproducing audio and/or video (AV) data in an interactive mode using a markup document (See Tsumagari Abstract), the method comprising: interpreting the markup document comprising AV data embedded therein, obtained from an information storage medium, upon request from a user; (See Tsumagari Figure 31 DVD format in context of Figure 1 user's operation #40, and paragraph [0065]. discussing embedding/integrating HTML and DVD-Video) presenting the markup document comprising the AV data embedded therein on a screen; (See Tsumagari Figure 2C in context of [0141]-[0142], discussing the display of mixed A/V contents for playback and ENAV, e.g., HTML) and facilitating an interaction between the markup document and the user, thereby allowing the user to pause and/or stop the presentation of the markup document and the AV data on the screen, via a remote controller, during the interactive mode. (See Tsumagari [0088], discussing remote controller use for transmitting users inputs, and paragraph [0261] discussing event signals associated with playback operation.)

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Claims 12-13 and 15 are each directed to a computer readable medium comprising executable instructions for implementing the methods of claims 1-2 and 11. As such, these claims are substantially similar to claims 1-2 and 11, respectively, and therefore likewise rejected.

Regarding independent claim 16, Tsumagari discloses: A method of reproducing data recorded on an information storage medium using a reproduction apparatus (See Tsumagari Abstract), comprising: reading data recorded on the information storage medium in an interactive mode, including a markup document and markup resources representing audio/visual (AV) data that are linked and embedded into the markup document; (See Tsumagari Abstract, Figure 31 and 34, and paragraph [0065], discussing embedding/integrating HTML and DVD-Video) and presenting the markup document according to a document life cycle on a screen in which selected markup resources representing AV data are provided in a display window defined by the markup document; (XXX See Tsumagari Figure 2C in context of [0141]-[0142], discussing the display of mixed A/V contents for playback and ENAV, e.g., HTML. see also [0402] discussing layout manager functions) wherein, upon a user's request via a remote controller, the presentation of the markup resources representing AV data provided in the display window defined by the markup document on the screen can be paused or

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stopped to resume at a later time. (See Tsumagari [0088], discussing remote controller use for transmitting users inputs, and paragraph [0261] discussing event signals associated with playback operation.)

Regarding claim 17, Tsumagari discloses the use of JavaScript and DVD storage media. (See Tsumagari [0066]-[0067]).

Regarding claim 18, Tsumagari discloses the validation of markup language documents and blending. (See Tsumagari [0399] discussing document verification and [0141]-[0142] discussing video mixing.)

Regarding claim 19, Tsumagari discloses the document termination and discarding. (See Tsumagari [0421] discussing buffer management including the discarding of buffer contents, in the context of [0395]-[0397], discussing the ENAV buffer.)

Regarding claim 20, Tsumagari discloses pausing a document. (See Tsumagari [0207]-[0208] discussing pausing.)

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Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 8-10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ralph LaBarge ("WebDVD Products & Techniques, Part 2", downloaded from: www.dvdmadeeasy.com/subscriber/ articles/02122001-2b/02122001-2b.pdf, © 2001, pp. 1-9, hereafter referred to as "LaBarge") view of Morrison et al. (XML Unleashed, Sam's Publishing, Indianapolis, IN, Dec. 1999, pp. 149-153, 156-172, 174-179, 184-202, 206-209, 289-290, 424, 427, 431-443 and 463-467, hereafter referred to as "Morrison").

Regarding independent claim 8, LaBarge discloses: A method of presenting a markup document in an interactive mode, (See LaBarge "Microsoft WebDVD" section on page 5, especially the third paragraph which discusses interactive HTML pages.) the method comprising: and decoding markup resources representing AV data linked to the markup document and outputting the markup document rendered along with the markup resources representing AV data for presentation on a screen in which the markup resources representing AV data are provided in

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a display window defined by the markup document. (See LaBarge Figure 2 and "InterActual Player 2.0" section on page 3, especially the first paragraph which discusses DVD video and integrated HTML content, a user interface for the display of DVD video in a window and the customization of InterActual Player 2.0 GUI skins.)

However, LaBarge does not explicitly disclose the remaining limitations. Morrison, though, discloses: interpreting the markup document and generating a document object tree according to a predetermined rule; (See Morrison Figure 12.1 on page 207, showing document parsing and tree generation, in context of the second bullet under the third paragraph of "Processing an XML Document", which teaches the use of a DTD. See also the Microsoft Dictionary, 5th Edition definition of "DTD" on page 179, discussing the use of a DTD to provide formal definitions (or rules) for use by a parser.) interpreting a stylesheet to define a document form of the markup document and generating a style rule/selector list; (See Morrison in the first paragraph under "Inside a CSS Style Sheet" on page 157, discussing rule selection for applying a set of styles to a document.) interpreting a script code that is included in the markup document; (See Morrison section entitled "Statements" on page 424, discussing the well known use of interpreted JavaScript statements within a markup document.) applying the style rule/selector list to the document tree to create a document form; (See Morrison in the first paragraph under "Inside a CSS Style Sheet" on page 157, discussing the application of styles to a document.) generating a formatting structure that corresponds to the document form; rendering the

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markup document according to the format structure; () (See Morrison section entitled "Inside a CSS Style Sheet" on page 157, particularly noting the second and third paragraphs and the style rule code ["p { ... }"], which teach the mapping of style rules to element types and the display in accordance with the style rule.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Morrison for the benefit of LaBarge, because to do so would have provided a programmer with the ability to cleanly separate content and presentations of a markup document, as taught by Morrison in the second paragraph under "A CSS Primer" on page 156. These references were all applicable to the same field of endeavor, i.e., web-based programming.

Regarding claim 9, LaBarge does not explicitly disclose this limitation.

Morrison, though, discloses arranging nodes in a tree-like fashion, having a root node labeled as "document". (See Morrison Figure 15.1 and the paragraph following this figure on page 290, noting that the figure tree includes a root node labeled as "document" and also text, element, version, and comments nodes. Additionally, the code Listing 15.1 on page 289 shows XML code corresponding to the document tree of Figure 15., and the first line of the code includes a document type, which produces a version or processing node.)

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Regarding claim 10, LaBarge does not explicitly disclose this limitation.

Morrison, though, discloses preloading a markup document before processing and rendering. (See Morrison Figure 12.1 on page 207, showing the loading of a markup document before parsing, tree generation and rendering.)

Claim 14 is substantially similar to claim 8, and therefore likewise rejected.

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Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Non-patent Literature

LaBarge, Ralph, "WebDVD Products & Techniques, Part 2", downloaded from: www.dvdmadeeasy.com/subscriber/ articles/02122001-2b/02122001-2b.pdf, © 2001, pp. 1-9.

Corcoran, P. M., et al., "Home Network Infrastructure for Handheld/Wearable Appliances", <u>IEEE Transactions on Consumer Electronics</u>, Vol. 48 Issue 3, Aug. 2002, pp. 490-495.

Sheth, Amit, et al., "VideoAnywhere: A System for Searching and Managing Distributed Heterogeneous Video Assets", <u>SIGMOD Record</u>, Vol. 28 No. 1, Mar. 1999, pp. 104-109.

Hardaway, Don, et al., "Digital Multimedia Offers Key to Educational Reform", Communications of the ACM, Vol. 40 No. 4, Apr. 1997, pp. 90-96.

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| Millner | 2004/0021684 |
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| Jarman | 6,898,799 |
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| Mercier | 6,865,747 |
| Allport | 6,567,984 |
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| Gupta et al. | 6,546,405 |
| Crow et al. | 6,850,256 |
| Yoshio et al. | 6,215,952 |
| Getsin et al. | 6,529,949 |

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Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Stevens whose telephone number is (571) 272-4102. The examiner can normally be reached on M-F 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Robert Stevens Examiner

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August 21, 2006

SHAHID ALAM PRIMARY EXAMINER